

**ABSTRACT**

A thin film resistor (60) is contained between two metal interconnect layers (40, 100) of an integrated circuit. Contact may be made to the resistor (60) through vias (95) from the metal layer (100) above the resistor (60) to both the thin film resistor (60) and the underlying metal layer (40) simultaneously. The resistor (60) may include portions of a hard mask (70) under the vias (95) to protect the resistor material (60) during the via (95) etch. This design provides increased flexibility in fabricating the resistor (60) since processes, materials, and chemicals do not have to satisfy the conditions of both the resistor (60) and the rest of the integrated circuit (especially the interconnect layer 40) simultaneously.

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